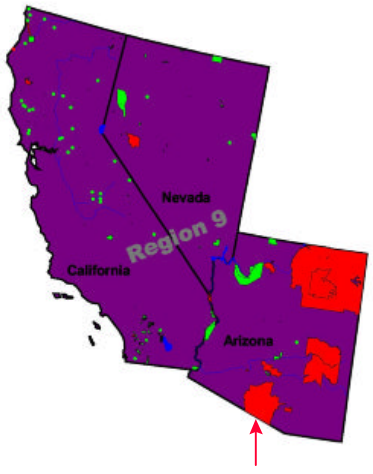
CLEAN WATER ACT INDIAN SET-ASIDE GRANT PROGRAM

SUCCESS STORY

Tohono O'odham Nation, Sil Nakya Community Wastewater Facility, Arizona

The Sil Nakya Community in the Tohono O'odham Nation is located in the Sonoran Desert of Southern Arizona. The Sil Nakya community had no existing community wastewater system. Indoor plumbing was present in only one home, which had a bathroom that discharged to a dry wash. All other homes, the community building, and the church utilized hand-dug pit privies. Due to the abundance of rock in the area, the pit privies were typically shallow and were often located next to the Sil Nakya Wash and other small washes where the soil was sandy and easier to dig. Odors, infestation by rodents, and safety concerns were among the health issues associated with these privies.

In addition to these problems were concerns regarding the community's water supply. The community's drinking water is drawn from an aquifer 200-300 feet below the surface. This aquifer is partially recharged by percolation through the fractured rock and highly permeable soils underlying the Sil Nakya Wash. Ground water is pumped from the aquifer by a well located on high ground adjacent to the Sil Nakya Wash. There was a concern that discharge from the privies in and around the Wash would contribute to groundwater contamination, and thus to drinking water problems.



Tohono O'odham Nation

In 1991, the Tohono O'odham Nation received a Clean Water Indian Set-Aside grant from EPA totaling $416,000 to construct a community sewage collection system, and a total retention lagoon to replace the existing pit privies in 17 homes in the community. The treatment system consisted of oxidation lagoons, and final disposal of treated wastewater was to be provided by evaporation. The total retention lagoon was comprised of two cells, both of which were lined with impermeable membranes.

The project was completed in April, 1995. Since that time, the systems have been fully operational. The new facilities successfully eliminated the pit privies and their associated health hazards and significantly reduced ground water degradation for the Sil Nakya community. This project was a

particular success for the tribe because the new facilities provided not only sufficient capacity for the existing community, but also was sized to accommodate some growth.